

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-25. (canceled).

26. (currently amended):     ~~An abnormal physiological formation treatment~~The device ~~as in of~~ claim ~~2563~~, wherein said polymeric ~~foam is matrix~~ comprises a reticulated elastomeric matrix.

27. (currently amended):     ~~An abnormal physiological formation treatment~~The device ~~as in of~~ claim ~~2563~~, wherein said polymeric ~~foam is matrix~~ comprises a reticulated biodegradable elastomeric matrix.

28. (currently amended):     ~~An abnormal physiological formation treatment~~The device ~~according to of~~ claim ~~2563~~, wherein said polymeric ~~foam matrix being is~~ is formed in said second a relatively large configuration, is subsequently compressed to said first configuration for delivery into the internal volume of the vascular malformation, and allowed to expand to said second to said volume for expansion to said first expanded configuration in vivo.

29. (currently amended):     ~~An abnormal physiological formation treatment~~The device ~~according to of~~ claim ~~2563~~, wherein said ~~implant comprises a biodegradable member configured for use in an abnormal physiological formation~~ vascular malformation is an aneurysm, a sac, an endo leak, or a perigraft space between an endograft and the vascular malformation an abnormal physiological formation.

30. (currently amended):     ~~An abnormal physiological formation treatment~~The device ~~according to of~~ claim ~~2563~~,

wherein said polymeric foam ~~matrix comprises~~ defines, through said polymeric foam, at least one fluidic passageway, path positioned, configured and dimensioned to providing ~~provide a flow of body fluid such as blood~~ flow through said at least one implant and into the to ~~said internal volume wall of said abnormal physiological formation~~ the vascular malformation, ~~and~~

wherein the blood flow being sufficient to promote cellular ingrowth and proliferation at said the internal wall, when said device is contained within said internal volume.

31. (withdrawn): An abnormal physiological formation treatment device according to claim 25, wherein said polymeric foam comprises a plurality of interconnected struts which bear against at least a portion of said internal wall to support said portions against which said interconnected struts bear.

32. (currently amended): ~~An abnormal physiological formation treatment~~ The ~~device according to of claim 25~~ 63, further comprising one more implant comprising a polymeric matrix, said one more implant a second expandable implant, said second expandable implant being expandable from a third relatively small configuration to a fourth relatively large configuration, the fourth configuration being larger than the third configuration,

wherein said third configuration is sized for delivery into the internal volume of the vascular malformation ~~said second implant comprising an expandable polymeric foam,~~ ~~wherein the second implant is deliverable into the abnormal physiological formation in said relatively small implant configuration, said expandable implant and said second expandable implant being configured and dimensioned to leave portions of said internal wall out of contact with said implants.~~

33. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~2563~~, further wherein the at least one implant further comprises a projecting portion of said implant is configured, dimensioned and positioned to be for facilitating grasped by a surgeon to facilitate positioning of the implant by a surgeon.

34. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~2563~~, further wherein the at least one implant is formed ~~consists~~ essentially ~~entirely~~ of a reticulated biodurable elastomeric matrix.

35. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~2563~~, further comprising an element comprising ~~made of~~ a material different from said polymeric matrix ~~compressible foam~~.

36. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim 35, wherein said polymeric ~~foam~~ matrix comprises is a reticulated elastomeric matrix, and wherein said element ~~made of a material different from said compressible foam is bendable~~ comprises a flexible material.

37. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim 35, wherein said element ~~made of a different from said reticulated elastomeric matrix is~~ comprises a strut-like shape.

38. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~3537~~, wherein said strut like shape ~~has a material characteristic suitable supports at least a part of the internal wall of the vascular malformation to perform a support function~~.

39. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~3537~~, wherein said strut like shape comprises is a support rod.

40. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~35~~63, wherein ~~the materials characteristic of~~ said at least one implant being adjustable to ~~are such that said implant may be manipulated into a suitable position within the internal volume of the vascular malformation.~~

41. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim 40, wherein said at least one implant being is substantially relaxed following insertion into the internal volume of the vascular malformation~~when fully deployed.~~

42. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim ~~25~~63, wherein said second configuration comprises ~~implant~~ has an elongated configuration.

43. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim 42, wherein said elongated configuration comprises a ~~is~~ substantially round ~~in~~ cross-section.

44. (withdrawn): An abnormal physiological formation treatment device as in claim 19 wherein said implant is substantially configured as a cylinder.

45. (withdrawn): An abnormal physiological formation treatment device as in claim 43 wherein said implant is substantially configured as a bullet shape with a blind hollow volume.

46. (withdrawn): An abnormal physiological formation treatment device according to claim 25, wherein an irregular cutout has been removed from said implant.

47. (withdrawn): An abnormal physiological formation treatment device as in claim 25, wherein said abnormal physiological formation is in fluidic communication with an artery and further comprising a sheath placed in the lumen of the artery.

48. (withdrawn): An abnormal physiological formation treatment device as in claim 25, wherein said implant is ribbed in configuration.

49. (withdrawn): An abnormal physiological formation treatment device as in claim 25 wherein said implant has a skeletal structure comprising support members and defining open spaces.

50. (currently amended): ~~An abnormal physiological formation treatment~~ The device as ~~in~~ of claim 2563, wherein said polymeric foam ~~matrix comprises~~ defines a continuous interconnected void.

51. (currently amended): ~~An abnormal physiological formation treatment~~ The device as ~~in~~ of claim 2563, wherein said polymeric foam ~~matrix comprises~~ defines pores having an average diameter from about 50  $\mu$ m to about 800  $\mu$ m density between 14 and 60 pores per centimeter.

52. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to~~ of claim 51, wherein said polymeric foam ~~matrix comprises~~ is a reticulated biodurable elastomeric matrix.

53. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~as in~~ of claim 2563, wherein said polymeric foam ~~matrix comprises~~ defines pores having an average diameter from about 100  $\mu$ m to about 500  $\mu$ m density between 16 and 32 pores per centimeter.

54. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~as in~~ of claim 2563, wherein said polymeric foam ~~matrix comprises~~ a biodurable elastomeric polyurethane matrix comprising a polycarbonate polyol component and an isocyanate component.

55. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~as in of~~ claim 2527, wherein said ~~biodurable~~ reticulated biodurable elastomeric matrix ~~comprising~~ comprises a polycarbonate polyurethane, polysiloxane[[,]] polyurethane, polysiloxane polyurethane urea, polycarbonate-polysiloxane polyurethane, polycarbonate-polysiloxane polyurethane urea~~hydrocarbon~~, or a mixture or copolymers, thereof.

56. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to of~~ claim 2563, wherein said polymeric matrix foam comprises a growth factor[[s]].

57. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to of~~ claim 2563, wherein said polymeric matrix foam comprises elastin to promote clot formation.

58. (currently amended): ~~An abnormal physiological formation treatment~~ The device ~~according to of~~ claim 2563, wherein said polymeric matrix foam comprises a radiopaque substance.

59-60. (canceled).

61. (withdrawn): A treatment device for an abnormal physiological formation containing blood under pressure, such as an aneurysm or a leaky repaired formation, for in situ treatment of said abnormal physiological formation in a mammal, optionally a human, said abnormal physiological formation having an internal wall defining an internal volume, the treatment device comprising at least one expandable implant, said at least one expandable implant being expandable from a first relatively small implant configuration to a second relatively large implant configuration providing support for at least a portion of the internal wall of the abnormal physiological formation, said at least one implant comprising an expandable

polymeric foam, wherein said implant has a surface with elevations and depressions structured to allow a flow of blood to promote cellular metabolism at the surface of said internal wall.

62. (withdrawn): A method of making a treatment device for treating an abnormal physiological formation containing blood under pressure, such as an aneurysm or a leaky repaired formation in a mammal, optionally a human, said abnormal physiological formation having an internal wall defining an internal volume, the method of making comprising forming a polymeric foam comprising a biodurable elastomeric polyurethane matrix, wherein the biodurable elastomeric polyurethane matrix comprises a polycarbonate polyol component and an isocyanate component formed by polymerizing, cross-linking and foaming to form a resultant foam, followed by reticulation of the resultant foam.

63. (new): A device for treating a vascular malformation, wherein said vascular malformation has an internal wall defining an internal volume containing blood under pressure, the device comprising:

at least one implant comprising an polymeric matrix, said at least one implant being expandable from a first configuration to a second configuration, the second configuration being larger than the first configuration,

wherein said first configuration is sized for delivery into the internal volume of the vascular malformation, and

wherein said second configuration is fitted at least in part to a shape of the internal wall, providing physical support to the internal wall of the vascular malformation.

64. (new): The device of claim 63, wherein said second configuration includes a convex outer surface in at least partial contact with the internal wall of the vascular malformation.

65. (new): The device of claim 63, wherein said polymeric matrix comprises pores having an average diameter from about 200  $\mu\text{m}$  to about 400  $\mu\text{m}$ .

66. (new): The device of claim 54, wherein said isocyanate component comprises at least one of 4,4'-diphenylmethane diisocyanate and 2,4'-diphenylmethane diisocyanate.

67. (new): A device for treating a vascular malformation, wherein said vascular malformation has an internal wall defining an internal volume containing blood under pressure, the device comprising:

at least one implant comprising a biodurable reticulated elastomeric matrix, said at least one implant being expandable from a first configuration to a second configuration, the second configuration being larger than the first configuration,

wherein said first configuration is sized for delivery into the internal volume of the vascular malformation, and

wherein said second configuration provides support to the internal wall of the vascular malformation.